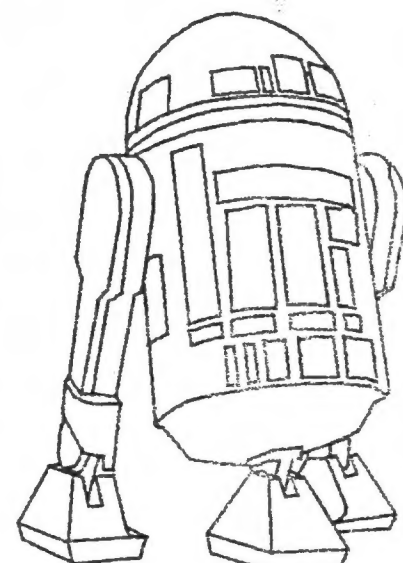
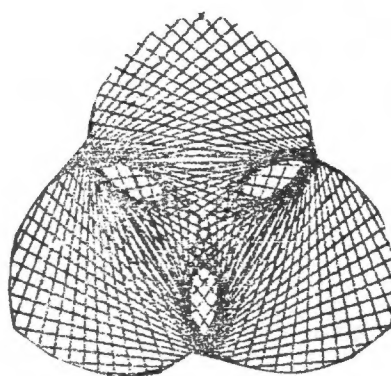
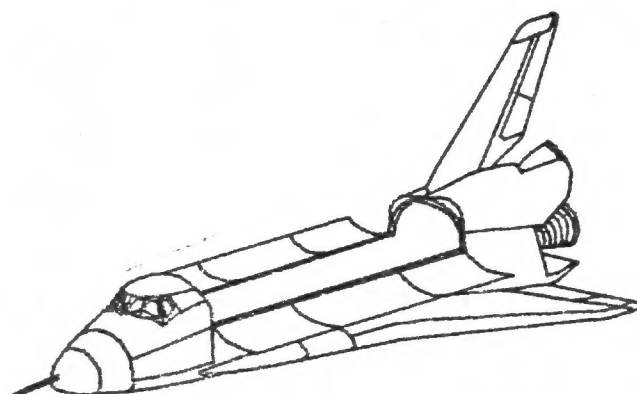
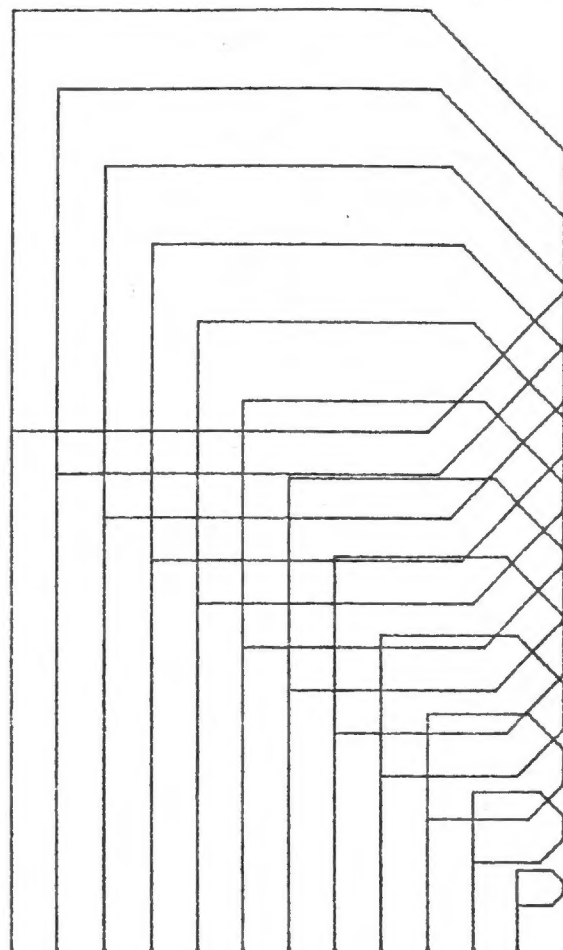


# THE RAMTOP

SEPTEMBER

1986

PUBLISHED BY THE  
GREATER CLEVELAND SINCLAIR USERS GROUP



# PLOTTERS

**WEST SIDE** GROUP MEETS AT LAKEWOOD PUBLIC LIBRARY  
15425 DETROIT AVE. LAKEWOOD OHIO 7:00 P.M.  
EVERY THIRD FRIDAY EACH MONTH  
CONTACT: DICK SIEG (216) 433-4387

**EAST SIDE** GROUP MEETS AT THE EUCLID SQUARE MALL  
IN THE EUCLIDIAN ROOM 7:30 P.M.  
EVERY FIRST FRIDAY EACH MONTH  
CONTACT: MAX SCHDOENFELD (216) 371-1096

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Editor----- James G. DuPuy  
Printer----- Al Gedris  
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Front cover- Ted Knyszek  
OL Column--- Gabe Schaffer  
Mailing----- John Velek  
Delivery---- Doug Gillespie  
And many thanks to all the other  
contributors that made it possible!

A short note to our friends from other newsletters and magazines. You are welcome to use any of our material, news, adds, or programs if YOU: (1) Tell where it came from (RAMTOP Cleveland, Ohio) and (2) The author's name that wrote the article. We would appreciate it if you would send us a copy of the newsletter that it appeared in! Unless otherwise notified we will do the same.

THANK YOU FOR YOUR INTEREST IN OUR NEWSLETTER !

THE TSU-BBS IS ALIVE  
SYSOP: Chris Raynak PHONE: 216-327-1099 PARAMETERS: 7/1/0

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## T/S RESOURCES

\*\*\*\*\*

news/rumors  
hardware software literature  
Sept. 1986 by Andy Kosiorek  
-----

### New Spectrum & 2068 Products:

The new Amstrad/Sinclair Spectrum Plus 2 computer will be on sale in the UK this month at about £140.00. It is an enhanced version of the Speccy 128, with an on board tape deck, improved Amstrad style keyboard, and joystick ports. Software houses have had advance units since about July.

Microdrive cartridges which were in short supply for a while are now available again. A agreement between the manufacturer, Ablex, and Sinclair research who owns the rights, was reached on continued sales directly by Ablex. Demand is for about 50 to 75,000 blank cartridges a month.

Saga Systems, a maker of after market keyboards for the Spectrum, is offering a hardware package called the "Compliment". It consists of a keyboard, 3.5" disk drive system, a near letter quality printer, and Saga's word processing software, "the Last Word". Their ads should be appearing in the forth coming issues of the UK magazines.

Tassman now has a version of Tassword III available for the Opus Discovery 3.5" disk system.

Cumana, a UK disk drive supplier is planning to market a "card" software interface for the spectrum, and other computers. This is a device that reads/records a magnetic coated card similiar in size to the average credit card. The cards can be programmed for almost any type of application. They will be available in four types, ROMS, PROMS, EPROMS, and RAMS.

Three inch disks, for the 2068 FDD disk drive system, are now in good supply again in the U.S. They are available from Zebra Systems, and Peripherals Direct.

In the September issue of Computer Shopper, Peripherals Direct has an add for the Amstrad 128K Computer System at \$599.00. The system includes monitor, printer, disk drives and Amstrads word processing software. CP/M software is also available for the machine.

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## T/S RESOURCES

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news/rumors  
hardware software literature  
Sept. 1986 by Andy Kosiorek  
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### Cleveland Free Net:

This is Cleveland's new mega-board BBS system, with 15 incoming lines that I described in last months column. Registration forms have now been mailed to all who have requested them. I will have also have some copies of the forms at the Club's September meetings. Or you can request one "on line". The systems number is 368-3886. Area code 216. We have applied for a Timex/Sinclair SIG in the "Public Square" section of the system. I hope to have this operational by early October.

### TSU-BBS:

Don't forget, and please call our Sinclair BBS at 216-327-1099

### Akron Computer Show:

I attended the Akron Computer show on August 23rd. Our Club had an excellant display. A big THANK YOU to Tom Simon and all of his assistants.

### Second Annual Mid-West Timex/Sinclair Computer Fest:

Mark your calendars, the second annual mid-west T/S Computer Fest will be held in Indianapolis, Indiana, on the first weekend of May 1987. The core of organizers of the Cincinnati show are preparing plans for the "reunion" of dealers, exhibitors, user groups and Sinclair fans from all over the USA. More details as they are made available.

### BYTE POWER:

Byte Power is a new cassette based magazine for the 2068. Each tape will have programs ranging from arcade games to business programs. Sample issue is \$5.50. Six issues are \$29.99. Subscriptions to; Byte Power, 1748 Meadowview Ave., Pickering, Ontario, Canada. L1V 3G8.

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## PLOTTERS BY-- Ted Knyszek

Just recently I got my hands on a COMSCRIBER I PLOTTER, I couldn't resist!! It's manufactured by Enter Computer as the SWEET PEA PLOTTER, and is sold to HEATHKIT and EPSON under their own names. The original list was \$795 and is now being sold for \$179. It is very fast and highly accurate at 6 inches per second and accuracy to 0.004" of an inch. The unit is light and small enough to fit in a standard briefcase.

The PLOTTER is controlled by simple commands you enter into your computer using LPRINT statements. All geometric shapes and alphanumeric characters are drawn by a combination of pen and paper movement. The pen travels in a holder across a track, while the paper moves back and forth via precision pinchwheel grip drives.

It was fairly easy to make up the INTERFACE CABLE and mate it up with the TASMAN PRINTER INTERFACE. Instead of using the TASMAN software, I found it works great with the OS-64 CARTRIDGE from ZEBRA. I'm sure it will work with any of the interfaces.

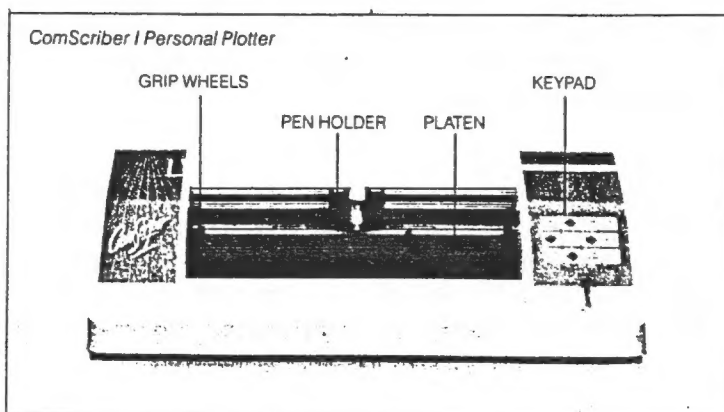
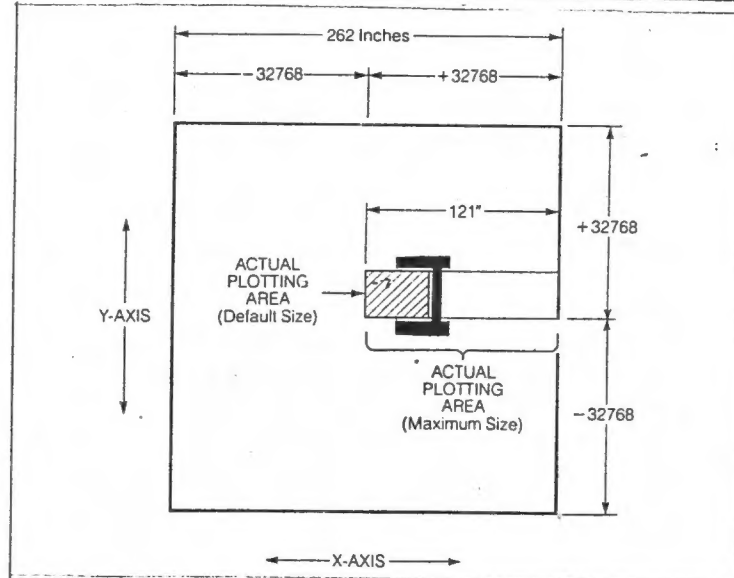
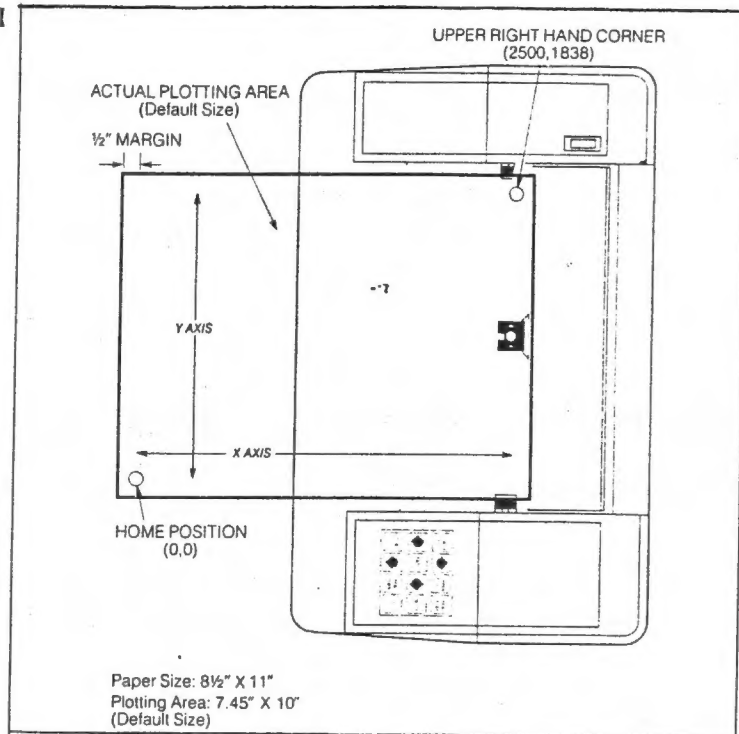
There are 12 keyboard controls PEN UP, PEN DOWN, FOUR ARROW KEYS for position, FAST for pen speed, UPPER RIGHT, LOWER LEFT, PAUSE, SELF TEST, and PEN DELAY. There are also 19 computer controlled commands Axis-X, Axis-Y, Character size, Draw absolute, Draw relative, Home, Line, Mark, Move absolute, Move relative, Pen down, Pen up, Point, Reset, Rotate text, Text, Text delimiter, Velocity setting for pen speed, and Page length which can be anything from 2 inches to roll paper 10 foot long.

The PLOTTING AREA when using 8 1/2 x 11 paper is X(2500) by Y(1838) pixels. The amazing part is it has enough memory to handle a PLUS or MINUS 32768 in either the X or Y AXIS, this is where the 10 foot roll of paper comes in. If your plotting is off of the normal size paper (using some wild graphics program) the PEN will merely lift up and then come back down in the right position when back into the normal plotting area. NO CRASHES!!!

As you can see from the front cover you can make the TEXT any size you want including the GRAPHICS.

I bought the auxiliary package which came with four colored pens an interface cable (I didn't use), and an Epson disk with many programs on it for the PLOTTER. A friend of mine, Dave Elliot, dumped all of the programs to hard copy for me. You can see some of the results on the front cover. THANKS DAVE!!!!!! All of the programs are easily converted to TIMEX LOGO.

HOPE TO SEE MORE PLOTTERS OUT THERE SOON !!!!!



## Small bit of news:

As many of you know, our Treasurer, Robert Parish, is handling our bank account. He was keeping the club records with his 2068 but he just sold it to one of our RAMTOP subscribers. (John Poland) I hope he will attend meetings! Anyway, I will now be keeping the records since I also print the labels. Bob will STILL be the treasurer unless he wants to give that up which I sure that he doesn't. He is still turning on his HOST BBS for messages only. Checks must still go to ROBERT PARISH. If you need information about another member such as a phone# or address, call James G. DuPuy.

## GoLumn

by Gabe Schaffer

Hi, all! This time, as promised, will be the conclusion of the review of Easel, with some of the more important commands and interesting problems. But first, if you have comments, please write to:

Gabe Schaffer  
2599 Saybrook Rd.  
Univ. Hts., Ohio 44118

### COMMANDS

#### DEFAULTS:

This lets you change the amount of characters per line and the amount of colors available. There are three settings: 40 characters per line and all 8 colors, 64 characters per line and only 4 colors, and 80 characters per line and 4 colors.

#### FILES:

This allows you to make a backup of a file, delete a file, import data to a file, export data from a file, and format a microdrive cartridge. As far as I know, everything the file command allows you to do can be done with whatever storage medium you are using. (All I have are the two built-in microdrives, so I wouldn't really know.)

#### HIGHLIGHT:

This highlights data on your graph. Easel will not let you enter this mode if the current set of values is represented by a line. If the current set of values is represented by bars, you are allowed a choice of highlighting all of the negative values, or selecting just a single value (a highlighted bar is distinguished by a reverse-selected pattern.)

If the current format is a pie graph (where negative values can't be shown), you can only highlight a single segment (a highlighted segment is 'pulled out' of the pie). You can also delete a highlighted value.

#### NEWDATA:

This creates a new set of values (which can easily be done with a simple formula in immediate mode).

#### OLDATA:

This allows you to change the current set of values.

#### PRINT:

This will make a screen dump to either a printer or a file on whatever storage medium you're using. There are a few problems which will be discussed in the next section.

#### VIEW:

This command lets you view any or all sets of values in any one of the 8 formats. When you view more than one set of values and you choose a format lower than 7, a key is used (discussed last month). If you decide to view your values in format 7 (a pie graph), where only one set of values can be displayed at a time, (only the current set or the first set of values typed in), a key is not needed.

### PROBLEMS

In this section, I will discuss the problems with the EDIT, CHANGE and PRINT commands.

#### EDIT:

With EDIT, there's only one problem, but it pervades almost everything EDIT can do. The problem is that anything that can be positioned is pasted wherever you put it. This may not sound like much, but if you change the size of the graph or the amount of characters per line, or print the graph, anything that needs positioning is not at the same place it is on the screen.

#### CHANGE:

There are two problems with changing the format from a vertical graph to a horizontal one (or the other way around). The first problem is like the one above, in that text for one format may not be suitable for another, because the graph changes and the text doesn't. Also, the axis labels don't move while the axis values do.

The other problem occurs when changing from a vertical to a horizontal format. Normally, the x- and y-axis origins are at the lower left corner of the grid, so that the y-values increase toward the top and x-values increase toward the right. Values entered into Easel produce a vertical bar graph that follows this convention. However, when a horizontal bar graph is requested, the x-values are rotated to the y-axis such that the origin moves to the top - i.e. the bars that previously ran left-to-right are now top-to-bottom, rather than bottom-to-top. If you don't want the data displayed like this, you will have to type it in with the last value first and the first value last. But if you do, and you switch to a vertical format, the values will be backwards again.

#### PRINT:

There are also two problems with PRINT, which are the fact that the graph is enlarged to print (resulting in the same problem described for EDIT) and the color coding - on the printer, all the white is black and vice versa (green and red each have distinguishable patterns).



Easel is a very good and very easy-to-use program, and it comes free with the computer. There are even many things I did not include in this review (e.g. formulae) because it would be too long.

In the future I will review others of the four bundled software packages.

Here is a short program. Just type it in and run it.

```
100 OPEN #3,scr_512x256a0x0:MODE 4:SCALE #3,300,5,4:OVER #3,-
1:REPEAT circ:FOR f=1 TO 25:FILL #3,1:INK #3,RND(255):CIRCLE
#3,RND(512),RND(256),RND(256):BEEP RND(32767),RND(255),RND(32
767),RND(7),RND(15),RND(15),RND(15):PAUSE 15:FILL #3,0:NEXT f
:CLS#3:NEXT circ
110 REMark Try having MODE 8 and change the ink color (0 to 2
55)
```

## September Editorial

Howdy! Fall is on its way! It just so happens that Fall is my favorite season. As you can see, I am making an attempt to get back on a schedule. Let me tell you that I APPRICIATE ALL YOU FINE ARTICLES! I am sure that I speak for all of our readers also! I had planed to use material from several newsletters to make up most of the RAMTOP this month but many of you came through again! Again, a real warm THANKS!

Please remember that our newsletter is what it is solely because of the constant new material from our members! If you have a program or an article that you feel would be interesting, please send it to me! It would be a big help if you would send them using Tasword or Mscript. This will help a lot since I can load it in and print it using my SG-10. Send your articles to:

James G. DuPuy  
6514 Bradley Ave.(DOWN)  
Parma, Ohio 44129  
Phone: 216-661-4105

Be sure to type in the 2068 program! It is real NEAT! I got it from ZXAppeal, the newsletter from the Vancouver SUG. It will turn your monitor into a sort of low resolution ocilliscope. The advantage is that you can get a hard copy! It takes the signal in the EAR jack. Caution! don't exceed 8-10 U.!

James G. DuPuy 5

"SPRITES 2068" with 34 page Manual by C. Vernon Tidwell and Ron R. Ruegg. Available from authors for \$20; soon to be featured by Zebra.

C. Vernon Tidwell, 1303 Whitehead St., Key West, FL 33840

Ron R. Ruegg, 37529 Perkins Rd., Prairieville, LA 70769

The authors set out to provide a program and manual for tyros to pros. Reading the manual set me on the scale at tyro immediately. Still, Vern Tidwell is known to me personally and I have already availed myself of their generous offer of support by requesting codes, etc., to transfer the cassette to my Zebra disk system. It came by return mail. Since these guys collaborated on the authorship by mail and phone, Ron Ruegg can only be also congenial.

A comprehensive program? Yes, they secured the cooperation of TIMEX COMPUTER CORPORATION (awesome) relative to the Sprite Graphics Support Package in the **Timex 2068 Technical Manual**. I was not aware that TCC actually still existed beyond a holding company for patents and certainly thought that TCC, located up there in New England like the Cabots and the Lodges, spoke only to God. So, thorough, yes.

The Manual is a superb tutorial in graphics. If you are not a visual learner, you may not be so dependent upon bookish materials as I, but I ran the program, then read the manual, then ran the program again. There wasn't a total vacuum between my ears at the end of the first program run, but I had no idea of the power potential till I read the manual. In truth, the potential will not be reached without some application by the buyer. This is going to be an acquired skill like modeming--study, experiment.

## A 2068 PROGRAM

This is a program that will transform your 2068, monitor and printer into a low resolution oscilloscope. You feed in the signal to be tested into the EAR socket. YOU MUST BE SURE NOT TO APPLY OVER 10 VOLTS! I suggest using your tape recorder or a small amp such as the one available at Radio Shack. (277-1008) It can be handy in looking at the level of a tape that you have had trouble loading or finding a drop-out. Actually, I just like to look at the display! Another nice thing is that you can hit the SPACE bar and then the "C" key and get a copy on the 2040 printer! (or a full sized printer with the right driver)

Please note that you will get a straight line at the top of the screen if you don't have enough signal. Give it a try! It will only take you a short time to type it in and you might just get a real kick out of it!

My THANKS to the VANCOUVER SUG (ZXAppeal) for this program. I made a few changes to enhance it a bit.

1 REM from ZXAppeal, the Vancouver SUG newsletter.

2 REM This program was typed, test and modified a bit by: James G. DuPuy If YOU wrote the program, Please let me know!

10 BORDER 1: POKE 23609,10

100 REM AUDIO SCAN

102 DEF FN a(1)=1+INT (.5+1/30)

103 GO SUB 410

105 GO TO 200

110 DRAW INK FN a(1/1.5);x-n,INT (-1+y)/1.5: LET x=n: LET y=1: RETURN

120 DRAW INK FN a(1/1.5);0,-1/2: RETURN

200 PAPER 0: INK 7: BRIGHT 1: CLS

210 PRINT AT 0,10;"Audioscan"

220 PRINT AT 2,2;"This program gives a graphic representation of a signal into the 2068 EAR socket.."

225 PRINT AT 7,2;"Load tape or other signal source to the EAR socket and select option ."

230 PRINT AT 12,5;"1 -- Line Graph";AT 13,5;"2 -- Bar Graph";AT 14,5;"3 -- Point Graph"

240 INPUT INVERSE 1;"Enter option (1-3): ";q: IF q<1 OR q>3 THEN GO TO 240

250 CLS: PRINT #1; INVERSE 1;"SPACE to freeze scan": LET i\$="" : LET x=0: LET y=0

252 ON ERR GO TO 270

255 FOR n=0 TO 255: LET l=USR t one: PLOT n,INT (1/1.5)

260 IF q<3 THEN GO SUB 100+(q\*10)

265 LET i\$=INKEY\$: IF i\$=" " THEN GO TO 300

270 NEXT n

275 GO TO 250

300 ON ERR RESET: PRINT #1; INVERSE 1;"m=Menu r=Resume c=Copy e=End": PAUSE 0

310 LET i\$=INKEY\$: IF i\$="m" THEN RUN

315 IF i\$="c" THEN COPY: CLS

320 IF i\$="r" THEN GO TO 270

330 IF i\$="e" THEN STOP

340 GO TO 300

400 DATA 1,0,255,17,0,0,219,254,203,119,32,1,19,16,247,66,75,201

410 LET tone=65368

420 FOR n=tone TO tone+17: READ d: POKE n,d: NEXT n: RETURN

425 STOP

430 SAVE "audioscan": RUN

THE UNIVERSITY OF CHICAGO PRESS

.....

.....

100

.....

100

\*Robert Parish, 12706 Leeila Ave., Cleveland, OH 44135 \*

[illegible]

7

FLASH!!!

I got a letter from A+. They are now selling the QL as a kit! It includes: Tech manual, QL instruction manual, monitor adapter cable, serial cable, complete QL kit: 2 micro drives, case, keyboard, and motherboard. Also included are microdrive cartridges and the power supply. The price: \$139.00! The address is: A+ Computer Responce, 69-B; Island St., Keene, NH., 03431, phone- 1-603-357-1800. They take Visa & MC. No mention was made about warranty so check with them!

There is a LOAN program for the 1000/500/ZX-81. I tried it and it is a good one! It's from the ZXAppeal.

AMOUNT OF LOAN: 10000  
ANNUAL INTEREST RATE: 5.9  
LOAN DURATION IN MONTHS: 12  
PAYMENT= 860.21

NO.	INTEREST	PRINCIPAL	BALANCE
1	49.17	811.04	9188.96
2	45.18	815.03	8373.93
3	41.17	819.04	7554.89
4	37.14	823.07	6731.82
5	33.1	827.11	5904.71
6	29.03	831.16	5073.53
7	24.94	835.27	4238.26
8	20.84	839.37	3398.89
9	16.71	843.5	2555.39
10	12.55	847.65	1707.74
11	8.4	851.81	855.93
12	4.21	855.93	0

From:

THE GREATER CLEVELAND SINCLAIR USERS GROUP  
James G. DuPuy (Editor)  
6514 Bradley Ave.(Down)  
Parma, Ohio 44129

TO:

Kaczor, Jon  
4568 Williamston Ave.  
Brooklyn, OH  
44144

87/05/16

```

10 REM "LOAN"
15 POKE 16513,234
20 PRINT "AMOUNT OF LOAN: ";
30 INPUT A
40 PRINT A
50 PRINT "ANNUAL INTEREST RATE
";
60 INPUT R
70 PRINT R
80 PRINT "LOAN DURATION IN MONTHS: ";
90 INPUT M
100 PRINT M
110 LET Z=(R/100)/12
120 LET D=(1+Z)**M
130 LET D=1-(1/D)
140 LET P=A*(Z/D)
150 LET P=.01*INT (P*100+1)
160 PRINT "PAYMENT= ";P
165 PAUSE 1000
170 PRINT
200 SCROLL
210 FOR I=1 TO M
220 SCROLL
225 PRINT AT 0,0;"NO. INTEREST
PRINCIPAL BALANCE"
230 LET Y=A*Z
240 LET Y=INT (Y*100+.5)/100
250 LET R=P-Y
260 IF R>A THEN LET R=A
270 LET A=INT (.5+100*(A-R))/10
0
280 PRINT AT 21,6;".00";TAB 18;
".00";TAB 29;".00"
290 PRINT AT 21,0;I;TAB (4+(Y<1
E3)+(Y<100)+(Y<10));Y;TAB (14+(R
<1E3)+(R<100)+(R<10));R;TAB (22+
(A<1E6)+(A<1E5)+(A<1E4)+(A<1E3)+
(A<100)+(A<10));A
300 NEXT I

```